## WHAT IS CLAIMED IS:

Subai)

10

15

20

25

30

1.\An image pickup apparatus comprising:

imaging means for performing one read-out operation to read out data of half of all pixels;

incident-light quantity adjusting means for adjusting a quantity of light incident upon the imaging means; and

drive control means for driving/controlling the incident-light quantity adjusting means in such a manner as to block an incident light upon the imaging means while data of all the pixels is read out from the imaging means.

2. The image pickup apparatus according to claim 1 further comprising:

memory means for storing the data of all the pixels read out from the imaging means;

field generating means for fetching pixel data every two adjacent lines out of the data of all the pixels stored in the memory means and then summing the thus fetched pixel data, thereby generating a first field and a second field which is shifted by one line from the first field; and

picture generating means for generating one frame of still pictures based on data of pixels of the first field and the second field.

3. The image pickup apparatus according to claim 2 further comprising display-format converting means for mutually converting a picture-display format between a first picture-display format and a second picture-display format.

4. The image pickup apparatus according to claim 2 further comprising mixing means for mixing a first picture with a second picture.

ADD as